The Used Oil Problem: What Can You Do?

Waste oil has the worst environmental impact of all automotive products because it's insoluble, persistent, and laced with toxic chemicals and heavy metals. Oil sticks to everything from beach sand to bird feathers. It floats on and pollutes our waterways. It is slow to degrade and evaporate. A small amount seriously contaminates large quantities of drinking water.

How big is the used oil problem?

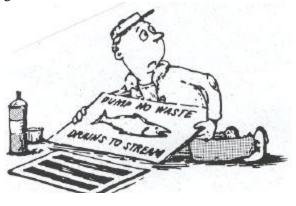
More than 4.5 million gallons of used oil are discarded without being recycled every year in Washington state.

Used oil is the largest single source of oil pollution (over 40 percent) in our nation's waterways.

In 1960, service stations performed 90 percent of the United States' automotive oil changes. Today one out of every two households changes the oil in their own automobiles.

Often householders dump their waste oil down a storm drain, pour it on the ground, or send it off to a landfill with their garbage.

Oil poured into storm drains often ends up in streams, lakes, and bays. Oil poured on the ground or deposited in landfills can leach into groundwater.



What are the effects?

During use, new oil picks up toxic chemicals, carcinogenic hydrocarbons, and heavy metals which harm the environment and public health when used oil is disposed of improperly.



In the water:

One pint of oil can produce a slick covering approximately one acre of water.

Used oil in waterways threatens fish, waterfowl, insects and aquatic life. In salt water, oil kills the microscopic plankton and algae that form the base of the marine food web.

Very small amounts of oil spilled in the habitat of fish and shellfish can contaminate their flavor.

On the land:

Used oil seeps through landfills and soils to contaminate groundwater supplies.

One quart of oil can foul the taste and purity of 250,000 gallons of water.

Used oil applied to roads as a dust suppressant causes water pollution. Over 90 percent leaves the road surface on dust particles or in rain runoff, according to an EPA study. The used oil can carry heavy metals and other toxic substances into nearby waterways.

In the air:

Burning unprocessed used oil can pollute the air we breathe with chemicals which are potentially harmful to human health. Reprocessing removes heavy metals and some other contaminants from used oil.

What Can You Do? RECYCLE!

Used oil is a valuable resource. By recycling it, you can protect the environment AND save energy and non-renewable petroleum resources. Re-refining is the best form of oil recycling, because it makes used oil as good as new for lubricating engines. It typically takes 42 gallons of high quality crude oil to yield 2.5 quarts of new refined motor oil. But just one gallon of used oil can yield that same 2.5 quarts of re-refined oil. Oil never wears out; it just gets dirty!

Oil Recycling in Washington

Because there is presently no re-refinery operating in Washington, most used oil in the state is reprocessed into fuel oil. Reprocessing removes the toxic components of the oil so it can be used as a fuel. One gallon of reprocessed oil yields about 140,000 BTUs of energy.

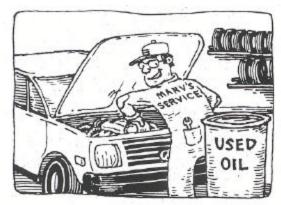
Washington state law declares that it is in the public interest to promote collection and recycling of used oil. The law has set a goal to collect and re-refine 80 percent of the used oil from the state's households by 1996. The law further requires that all used oil be taken to a collection center for recycling or disposal. Actions which render oil non-recyclable, such as the use of absorbent-based draining kits, are also prohibited. (see Chapter 70.95I RCW)

Used oil should be managed in a way that protects the environment. Generally this means recycling.

It's up to you, the oil user, to return used oil to a collection center. The more oil consumers return, the more oil we can recycle, and the less oil will be released to the environment.

How?

If you have your oil changed by a service station, make sure the station recycles your oil for you. Request re-refined oil be used in your automobile.



If you change your own oil:

1) Before you drain your crankcase, call 1-800-RECYCLE

for the location of the collection center nearest you. If you have trouble finding a convenient site, call your county used oil recycling coordinator for alternatives.

- 2) Return waste oil in a clean, sealed container (a plastic milk jug will do nicely) to a collection center. Don't use any absorbent material in the container, because this will make the oil impossible to reclaim.
- 3) Never mix used oil with antifreeze, engine degreasers, gasoline, paint thinner, solvents, cooking oil, etc., since these nonmotor oil substances interfere with the reprocessing and re-refining processes. One bad jug of contaminated used oil can ruin all the oil in the collection tank. These increased costs are usually passed back to you, the consumer, in the form of higher prices and fees.
- 4) Buy and use re-refined oil.

RECYCLE USED OIL

- Prevent Water Pollution
- Protect Public Health
- Reuse Limited Resources
- Conserve Energy

For information on what, where, and how to recycle: call toll-free **1-800-RECYCLE**



Washington State Department of Ecology Solid Waste Services Program Olympia, WA 98504-7600

The Department of Ecology is an Equal OpportunityEmployer.

If you have special accommodation needs, please call (206) 407-6000 (Voice) or (206) 407-6006 (TDD).

A guide to

The Used Oil Problem

--- What can you do?

Washington State Department of Ecology Solid Waste & Financial Assistance Program





Printed on Recycled Paper Publication #90-BR-10 Revised 3/94